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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/782,287	02/14/2001	Takashi Nomura	203253US6	8358

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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VOLPER, THOMAS E

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 06/14/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/782,287

Applicant(s)

NOMURA, TAKASHI

Examiner

Thomas Volper

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-7 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinett et al. (US 2002/0131443) in view of Okura et al. (US 5,297,139).

Regarding claims 1, 3, 10 and 11, Robinett discloses a remultiplexer including storage means for storing data separately for each data flow which has been received from a first network and which is to be transferred to a second network (paragraph [0096]; see Figure 1), and control means for controlling the data transferred to the second network (paragraphs [0076] and [0092]; see Figure 2). Robinett fails to expressly disclose detection means for detecting the amount of data stored in the storage means, and transferring the data in accordance with the detection result. Okura discloses a buffer that receives data from a communication line that only reads data from the buffer when the amount of data in the buffer is above a certain threshold (col. 2, lines 28-44; see Figure 5). This meets the limitation of a detection means and transferring data

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in accordance with a detection result. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to detect the amount of data in the storage means of Robinett, and only read data from the storage means when the amount was above a certain threshold level. One of ordinary skill in the art would have been motivated to do this to prevent data underflow in the remultiplexer of Robinett.

Regarding claim 4, Robinett discloses replacing a null packet with a data packet to be outputted from the remultiplexer, which meets the limitation of discarding a dummy packet (paragraphs [0049] and [0050]).

Regarding claim 5, Robinett discloses inserting a null packet into the data stream to be outputted from the remultiplexer (paragraph [0050]).

Regarding claim 6, Robinett discloses gradually correcting a deviation of a time stamp included in the data over a predetermined period of time (paragraphs [0039] and [0040]).

Regarding claim 7, Robinett discloses that each transport packet containing a PCR is stamped with a receipt time stamp that is used to determine an actual dispatch time (paragraph [0137]). Robinett also discloses performing a final PCR correction as transport packets are outputted, so that the PCR in a transport packet is synchronized with the precise alignment of the transport packet in the outgoing stream (paragraph [0078]). Thus, the total period of time stamp correction extends from reception of a transport packet to the output of that transport packet. During this interval is when a null transport packet may be replaced with a data bearing transport packet (paragraph [0049]), thus meeting the definition of discarding dummy data at a substantially middle point of the period during which the time stamp is corrected.

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Regarding claim 9, Robinett discloses remultiplexing MPEG transport streams, which contain audio and video data and include temporally continuous content (paragraph [0034]).

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robinett et al. (US 2002/0131443) in view of Okura et al. (US 5,297,139) as applied to claims 1, 3-7 and 9-11 above, and further in view of Baker (US 5,948,080).

Regarding claim 2, Robinett in view of Okura discloses using an ATM network, which is a wide area digital network, as the first network, but fails to expressly disclose that the second network is an IEEE-1394 serial bus. Baker discloses that the IEEE-1394 standard lends itself to video applications and is highly compatible with ATM (col. 1, lines 35-49). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use an IEEE-1394 serial bus as the second network in the system provided by Robinett in view of Okura. One of ordinary skill in the art would have been motivated to do this because IEEE-1394 is ideally suited for transporting real-time multimedia applications, such as MPEG, to the digital video device of an end user.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robinett et al. (US 2002/0131443) in view of Okura et al. (US 5,297,139) as applied to claims 1, 3-7 and 9-11 above, and further in view of Saito et al. (US 6,523,696).

Regarding claim 8, Robinett in view of Okura fails to expressly disclose that the first network is connected to another first network which is not synchronous in terms of a network clock with the former first network. Saito disclose an AV device (205) that connects a public

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network (202) to an IEEE-1394 bus (203), representing the first and second networks, respectively, of the present invention. Saito also discloses that the public network (202) may also be connected to another IEEE-1394 bus (201), which represents the another first network of the present invention. Saito does not disclose that the IEEE-1394 bus (201) and the public network (202) are synchronized with respect to a network clock. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to connect the wide area network of Robinett in view of Okura to another first network, specifically the IEEE-1394 bus (201) of Saito. One of ordinary skill in the art would have been motivated to do this so that a digital video user connected to the second network of Robinett in view of Okura could receive a video stream from another digital video user on another network remotely connected to the first network of Robinett in view of Okura.

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Sato et al. (US 5,566,174) MPEG Information Signal Conversion System
- Roy (US 6,026,080) Method for Providing Enhanced H.321-Based Multimedia

Conferencing Services over the ATM Wide Area Network

- Movshovich et al. (US 6,434,146) Use of Sequencing Information in a Local Header that Allows Proper Synchronization of Packets to Subsidiary Interfaces within the Post-Processing Environment of an MPEG-2 Packet Demultiplexing Architecture

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7. Any inquiry concerning this communication, or earlier communications from the examiner should be directed to Thomas Volper whose telephone number is 703-305-8405 and fax number is 703-746-9467. The examiner can normally be reached between 8:30am and 6:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached at 703-308-6602. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

Thomas E. Volper

TEV

June 7, 2004

  
HUY D. VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600